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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,915	11/14/2003	Tsutomu Okabe	245156US3CIP	7664

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EXAMINER	
MOORE, KARLA A	
ART UNIT	PAPER NUMBER

1763

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/706,915

Applicant(s)

OKABE ET AL.

Examiner

Karla Moore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1103,0204</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Publication No. 2002/0064439 A1 to Otaguro.

3. Otaguro discloses a wafer processing apparatus in Figures 1-4, comprising: a chamber (200; paragraph 30); a first opening portion (22) through which the interior and the exterior of the chamber communicate; and a door (23) that substantially closes the first opening portion, wherein the door has a projection (uppermost and lowermost portions as seen in sectional view of Figure 1), and when the door is positioned to substantially close the first opening portion only the projection contacts with a periphery portion of the first opening portion (also see Figure 1).

4. With respect to claim 2, the projection is provided at one of four corners of the door as to protrude toward the outside of the door. See Figure 2 of Otaguro, the projection is provided at the top corners of the door.

5. With respect to claim 3, in case that the door is positioned to substantially close the first opening portion, an aperture (52; paragraph 31) through which the interior and the exterior of the chamber are in communication with each other exists.

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Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0064439 A1 to Otaguro in view of U.S. Patent No. 6,473,993 to Tokunaga.

9. Otaguro discloses a wafer processing apparatus substantially as claimed in Figures 1-4 including a clean-environment/chamber (200; paragraph 30) used for transferring a wafer (14) between a clean box (10) having a lid (13) and housing the wafer and the clean environment/chamber, said apparatus comprising: a first opening portion (22) in communication with the clean environment/chamber, facing an opening of the clean box so as to allow loading and unloading the wafer between the clean box and the clean-environment/chamber; and a door (23) that closes, when the transfer of the wafer is not performed, the first opening portion and opens, when the transfer of the wafer is performed, wherein the door has a projection (uppermost and lowermost portions as seen in sectional view of Figure 1), and when the door is positioned to substantially close the first opening portion only the projection contacts with a periphery portion of the first opening portion (also see Figure 1).

10. However, Otaguro fails to teach the clean environment as a mini-environment.

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11. Tokunaga discloses the use of a mini-environment for the purpose of holding wafers in an enclosed space to thereby protect the wafers from dust particles in the atmosphere or from chemical contamination (column 1, rows 53-56 and column 2, rows 36-40)

12. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided a mini-environment in Otaguro in order to hold wafers in an enclosed space to thereby protect the wafer from dust particles in the atmosphere or from chemical contamination as taught by Tokunaga.

13. Examiner notes that in claims 4-6, the claimed mini-environment and the claimed chamber have been interpreted as a single structure with the chamber being the inside of the mini-environment. This interpretation is consistent with the specification and drawings, which do not disclose a structural difference between the two.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USP Publication 2004/0069409 discloses a dust-proofing device for a FOUP. USP 6,390,754; USP 6,641,350 and JP Patent Publication 05109865A each disclose a door positioned to substantially close an opening portion, wherein the door only contacts with a periphery portion of the opening portion.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karla Moore whose telephone number is 571.272.1440. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571.272.1435. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Karla Moore
Patent Examiner
Art Unit 1763
8 March 2005